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testing a plurality of microsatellite markers in the specimen to determine a microsatellite marker length alteration relative to a control sample, wherein a microsatellite marker length alteration in the specimen relative to the control sample indicates the presence of a cancer in the organ which drains into the body fluid.

4 ~~25.~~ (Amended) The method of claim ~~23, 24, or 31~~ wherein the length alteration is an expansion of repeat units within the microsatellite marker.

5 ~~26.~~ (Amended) The method of claim ~~23, 24, or 31~~ wherein the length alteration is a deletion of repeat units within the microsatellite marker.

6 ~~27.~~ (Amended) The method of claim ~~23, 24, or 31~~ wherein the microsatellite marker comprises a tetranucleotide repeat.

7 ~~28.~~ (Amended) The method of claim ~~23, 24, or 31~~ wherein the microsatellite marker comprises a trinucleotide repeat.

9 ~~29.~~ (Amended) The method of claim ~~23~~ wherein the lung cancer is Small Cell Lung Carcinoma.

10 ~~30.~~ (Amended) The method of claim ~~23~~ wherein the lung cancer is Non-Small Cell Lung Carcinoma.

31. (Amended) A method for detecting bladder cancer in a urine specimen, comprising the step of:

testing a plurality of microsatellite markers in the urine specimen to determine a microsatellite marker length alteration relative to a control sample, wherein a microsatellite

marker length alteration in the urine specimen relative to the control sample indicates the presence of a cancer in an organ which drains into the urine.

32. The method of claim 31 wherein the cancer is Transitional Cell Carcinoma.

33. CANCEL.

34. A method for detecting cancer cells in a specimen external to a primary tumor comprising the steps of:

testing a plurality of microsatellite markers in a histopathological margin specimen external to a primary tumor to determine a microsatellite marker length alteration relative to a control sample, wherein a length alteration indicates the presence of cancer cells in the specimen.

35. (New) The method of claim 34 wherein the primary tumor is Head and Neck cancer.

36. (New) The method of claim 35 wherein the primary tumor is Squamous Cell Carcinoma.

37. (New) The method of claim ~~23, 24, or 31~~^{1, 2, 3} further comprising the step of:
identifying the specimen as containing cancer cells.

REMARKS

The office action of February 14, 2001 has been carefully reviewed and these remarks are responsive to it. Reconsideration and allowance of the instant application are respectfully requested.